

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

1-6 (Canceled)

7. (Currently Amended) A method of aligning a cap having a lens to a header holding a photonic device, the method comprising:

 a step for viewing, through said lens, a displacement of a first optical axis of said lens relative to a second optical axis of said photonic device;

 a step for moving said cap relative to said header to position said first optical axis of said lens proximate said second optical axis of said photonic device; and

 a step for mounting said cap to said header to hold said cap in alignment with said photonic device, wherein said steps are performed with said photonic device in an inactive state.

8. (Original) The method of claim 7, further comprising a step for hermetically sealing said cap to said header.

9. (Original) The method of claim 8, wherein said step for viewing comprises a step for viewing said photonic device by a video display system.

10. (Original) The method of claim 9, further comprising a step for overlaying a calibration pattern on said video display.

11. (Original) The method of claim 10, further comprising a step for moving said cap relative to said header until a center of said lens is within a preselected calibration distance of said photonic device.

12. (Original) The method of claim 7, wherein said step for moving said cap relative to said header comprises:

a step for positioning said header for movement in at least two of an x-direction, a y-direction, and a z-direction;

a step for positioning said cap for movement in at least two of an x-direction, a y-direction, and a z-direction; and

a step for moving at least one of said header and said cap in at least one of an x-direction, a y-direction, and a z-direction.

13. (Original) The method of claim 7, wherein said step for mounting said cap comprises a step for welding said cap to said header at at least one point.

14. (Currently amended) An apparatus to align a cap having a lens with a first optical axis to a header holding a photonic device with a second optical axis, said apparatus comprising:

a capture assembly adapted to hold said header having said photonic device, said capture assembly being movable relative to said cap having a lens;

an arm configured to support said cap, said arm being adapted to support said cap without obstructing a view of at least a portion of said lens; and

a visual display system adapted to depict, without the use of light emitted from, or reflected by, said photonic device, a position of said cap relative to said photonic device as said capture assembly moves relative to said cap to align said first optical axis and said second optical axis.

15. (Previously Presented) The apparatus of claim 14, wherein said arm is adapted to move said cap in at least one of an x-direction, a y-direction, and a z-direction with respect to said header.

16. (Original) The apparatus of claim 15, further comprising at least one welding system, said at least one welding system in electrical communication with said arm and said capture assembly.

17. (Original) The apparatus of claim 14, wherein said video display system comprises at least one camera and at least one video display.

18. **(Original)** The apparatus of claim 17, wherein said camera further comprises a zoom lens.
19. **(Original)** The apparatus of claim 17, wherein said video display system includes a video overlay including at least one calibration feature for determining when the photonic device is within a preselected alignment tolerance with the lens.
20. **(Previously Presented)** A packaged optical device assembled according to the method of claim 7.
21. **(Previously Presented)** The method of claim 7, wherein said photonic device is a laser.
22. **(Previously Presented)** The method of claim 7, wherein said photonic device is a photo diode.
23. **(Previously Presented)** The method of claim 7, wherein said lens comprises a ball lens.
24. **(Previously Presented)** The method of claim 7, wherein said photonic device comprises an optical detector.